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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,044	10/10/2003	Thomas L. Treon	MIDTF / 349P2	3262

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WOOD, HERRON & EVANS, LLP
2700 CAREW TOWER
441 VINE STREET
CINCINNATI, OH 45202

EXAMINER	
RO, BENTSU	

ART UNIT	PAPER NUMBER
2837	

DATE MAILED: 10/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	**Application No.** 10/684,044	**Applicant(s)** TREON, THOMAS L.
	Examiner Bentsu Ro	**Art Unit** 2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.
2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-30_ is/are pending in the application.
  4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) _1-3,5-17 and 19-30_ is/are rejected.
7)☒ Claim(s) _4 and 18_ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on _10 October 2003_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.
  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  a)☐ All b)☐ Some * c)☐ None of:
    1.☐ Certified copies of the priority documents have been received.
    2.☐ Certified copies of the priority documents have been received in Application No. _____.
    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
  Paper No(s)/Mail Date _1/26/04_.
4) ☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

FIRST OFFICE ACTION

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 5-8, 10-16, 19-21, 23-30 are all rejected under 35 U.S.C. 102(b) as being clearly anticipated by Magnoni US Patent No. 4,619,006.

The first group claims 1, 2, 5-8, 10-15 read onto Magnoni's teaching as follows:

The claims:	**Magnoni's teaching:**
1. A method of moving a movable support surface of a patient support apparatus, comprising:	Magnoni teaches a method and an apparatus for moving a re-education bed, which is a patient support apparatus; the re-education bed has support surfaces, such as a headrest D, a back area E, a thigh rest F, etc, see Fig. 1;
receiving input for initiating movement of the movable support surface; and	Fig. 16 shows a switch 201, flip of the switch 201 transmits an input signal for initiating movement of the movable support surface, such as the movement of the headrest D;
in response to the input, automatically supplying a voltage supply signal to an electric motor,	once the switch 201 is turned ON, a feeder (any one of the thyristors 207-227) automatically supplying a voltage supply signal to a motor (any one of the motors 49, 63, 69, 76,...., etc.);
wherein the voltage supply signal is	the motors are accelerated gradually, see

configured to cause the electric motor to gradually accelerate the moveable support surface.	abstract last five lines, recited as "..., *so that **graduated**, soft, constant, stable and repeated movements can be actuated and controlled as type, number, sequence, intensity, amplitude, duration, execution speed, **acceleration** and stall torque value."* (Emphasis added.)
2. The method of claim 1, further comprising gradually accelerating the moveable support surface according to the voltage supply signal.	see abstract last five lines and column 1, lines 51-55.
5. The method of claim 1, further comprising driving the electric motor at a desired speed according to the voltage supply signal.	see column 1, line 54, the words "execution speed" which is a desired speed.
6. The method of claim 1, wherein automatically supplying the voltage supply signal further includes determining the voltage supply signal.	Fig. 16 shows a microprocessor 204; the microprocessor 204 determines a desired supply voltage signal to the gate of the thyristor to fire the thyristor at a desired firing phase angle.
7.	Basically same as that of claim 6.
8. The method of claim 6, wherein determining the voltage supply signal further includes receiving a measurement determined by at least one of a voltage sensor and a current sensor.	column 5, line 3 specifies the control of a DC motor speed based on a speedometer dynamo or through a current ring where, in the system, the speedometer dynamo is lacking; it is noted that the "current ring" is a type of current sensor (or a type of current transformer) for controlling the motor speed based on the motor current value.
10. The method of claim 1, wherein automatically supplying the voltage supply	In Fig. 16, all the thyristors are fired based on a desired voltage supplied to the motor;

signal further includes modifying a duty cycle of the motor according to a control signal.	it is noted that when the motor desired speed is changed, the firing angle of the thyristor must also be changed accordingly; the changing of the firing phase angle of the thyristor is a modifying of duty cycle.
11. The method of claim 1, wherein automatically supplying the voltage supply signal further includes retrieving an acceleration profile from a memory.	Magnoni's re-education bed is controlled by a microprocessor 204 (Fig. 16) based on a specific program, see columns 5 and 6; because it is a program control, the speed profile, the acceleration profile, the operation time, the amplitude, the sequence, etc are all stored in a memory; the microprocessor 204 retrieves the desired information from the memory in order to control the operation of the bed, including control the acceleration of the motor.
12 (and similar claim 13). The method of claim 1, wherein automatically supplying the voltage supply signal further includes increasing a duty cycle if a determined voltage is different than a reference voltage.	Same reason as that of claim 10.
14. The method of claim 1, wherein automatically supplying the voltage supply signal further includes generating a control signal.	Any of the signals to the gates of thyristors 207-227 is a control signal; the control signal is generated by the microprocessor 204.
15. The method of claim 1, wherein automatically supplying the voltage supply signal further includes processing a control signal indicative of at least one of: directional data indicative of a desired direction of movement of the support surface, a speed measurement, a voltage	Fig. 16 shows a speedometer dynamo 50 for a speed measurement.

level, a load and a patient weight.	

Claims 16, 19-21, 23-28 are second group claims claiming an apparatus but otherwise similar to that of the first group claims (claims 1, 2, 5-8, 10-15). Because they are similar, explanation is omitted.

Claim 29 is a program product for the patient support apparatus. Magnoni teaches a program control using microprocessor. Therefore, the subject matter of claim 29 is met by Magnoni's program control.

Regarding claim 30, Magnoni's column 6, line 37 recites "several cards with specific duties." The cards appear to be a recordable medium.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 3, 9, 17, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Magnoni et al.

Regarding claims 3 and 17, Magnoni's column 5, line 9 states "a fixed speed reference". If there is a fixed speed reference, then there must have a fixed voltage reference because the speed is controlled by supplying the voltage to the motor.

Regarding claims 9 and 22, the supply voltage to the motor must compare with the fixed voltage reference so that the motor speed can be controlled.

5. Claims 4 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Any inquiry concerning this communication should be directed to Bentsu Ro at telephone number (571) 272-2072.

10/27/2004

Bentsu Ro
Senior Examiner
Art Unit 2837

Bentsu Ro